Folic Acid Levels Rise in Women, Study Finds

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■ Health: Food makers' mandate to add the vitamin, which could reduce chance of birth defects, to 'enriched' grain products appears to be having an effect.

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WASHINGTON—In the early 1990s, the federal government recognized that there were clear steps it could take to try to prevent horrific and sometimes fatal birth defects.

Scientists had amassed a wealth of data proving that consuming a little known but common B vitamin could reduce the chances of a woman giving birth to a baby with crippling spina bifida or the always fatal anencephaly.

Now, nearly three years after the Food and Drug Administration ordered food manufacturers to add folic acid, also called folate, to pasta, breads, flour and rice, the first federal study shows that the efforts are beginning to have an effect.

Levels of the nutrient have risen substantially among women of childbearing age, according to a study to be released today by the Centers for Disease Control and Prevention.

Federal health officials hope that the preliminary findings ultimately will translate into a sharp drop in the annual number of neural tube defects.

To that end, the government plans to analyze data from birth certificates of babies born in 1999—conceived in 1998 after fortification of most grain products became mandatory—to see whether actual reductions have occurred, and it will release the information sometime this spring.

"We're very excited that the trend is in the right direction," said Dr. Donald Mattison, medical director of the March of Dimes, predicting that—if the trend "is real and sustained"—reductions in these types of birth defects almost certainly will occur.

Demographics Not Included in Report

The CDC study showed that blood tests taken of 600 American women from the ages of 15 to 44 showed mean concentrations of 16.2 nanograms of folate per milliliter of blood—a dramatic increase from the 6.3 shown in similar studies conducted from 1988 to 1994, according to a draft of the report.

But Mattison pointed out that the

CDC report did not include the demographics of the women tested, making it more difficult to know for certain whether the increases were directly the result of adding the folic acid or other factors. These could include taking supplements or eating more fruits and vegetables containing the water-soluble B vitamin.

It also specifically did not identify communities where the women were tested, information that could have revealed whether fortified products were making a difference among populations regarded as at higher risk of folate deficiency, such as Latinas and those in lower socioeconomic groups.

Levels Consistent in Non-Pregnant Women

"We know that older women and more affluent women tend to consume more multivitamins and dietary supplements and probably eat more folate-containing foods," he said. "If this group was overrepresented in the CDC study, it might cloud the results."

But the draft did say that levels of folate were consistent among non-pregnant women, "a group less likely to use folic acid-containing supplements," for women who had used a vitamin-mineral supplement at least once in the previous 30 days, and for women who had not used supplements.

CDC officials refused to discuss the study before it was released publicly. These kinds of birth defects occur in about 4,000 pregnancies annually, including 2,500 live births. Spina bifida, a leading cause of childhood paralysis, is a condition in which the spinal cord is exposed. In anencephaly, most of the brain is missing.

Experts estimated that these could be reduced by up to 75% if every woman consumed enough folic acid, which naturally occurs in leafy, dark green vegetables, citrus fruits and juices, yeast and beans.

The government first recommended in 1992 that women of child-bearing age consume 0.4 milligrams of folic acid daily, either in food or supplements, to prevent birth defects.

The recommendation applied to all women—not just pregnant women—because more than half of all pregnancies are unplanned and these birth defects occur in the developing fetus before most women know they are pregnant.

In 1996, the FDA required food manufacturers to add folate to most grain products, with a deadline of January 1998.

The regulation was one of only a handful of government-mandated food fortifications in history, and it applies to all grain products bearing the label "enriched."